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CASE II/2-21851/A/PCT/RCE

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Lynn Girolamo
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Lynn Girolamo
Signature

3/29/04
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

Group Art Unit: 1752

SURULIAPPA GOWPER JEGANATHAN ET AL.

Examiner: A. C. Walke

APPLICATION NO: 09/806,360

FILED: MARCH 29, 2001

FOR: COLOUR PHOTOGRAPHIC MATERIAL

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Sir:

Enclosed herewith are three copies of the Appeal Brief in the above-identified application.

- ☒ Please charge Deposit Account No. 03-1935 in the amount of \$330.00 for payment of the fee. Two additional copies of this paper are here enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 03-1935.
- ☒ Enclosed is a Petition for Extension of time.

Respectfully submitted,

Tyler A. Stevenson
Agent for Applicants
Reg. No. 46,388

Ciba Specialty Chemicals Corporation
Patent Department
540 White Plains Road
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Tarrytown, NY 10591-9005
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Enc.
Date: March 29, 2004



CASE II/2-21851/A/PCT/RCE

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IN RE APPLICATION OF

Group Art Unit: 1752

SURULIAPPA GOWPER JEGANATHAN ET

Examiner: **Amanda C. Walke**

AL.

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P.O. Box 1450
Alexandria, VA 22313-1450

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APPEAL BRIEF

Sir:

This appeal is from the final rejection of claims 1-10, 12, 14 and 15 of the Office Action, Paper No. 14, dated August 29, 2003.

The Notice of Appeal was mailed to the U.S. Patent and Trademark Office by first class mail with a Certificate of Mailing on November 25, 2003. The return receipt postcard accompanying the Notice of Appeal was date stamped in the PTO mail room November 28, 2003, making this Brief due January 28, 2004. A petition for a two month extension of time is attached herewith, extending the timely period for response up to and including Monday, March 29, 2004.

This Brief is timely filed.

The Commissioner is hereby authorized to charge any necessary fee or credit any overpayment to Deposit Account No. 03-1935.

1. Real Party of Interest

The real party of interest, by virtue of an assignment recorded in the U.S. Patent and Trademark Office on February 26, 2003, Reel/Frame 013788/0013, is:

Ciba Specialty Chemicals
P.O. Box 2005
540 White Plains Road
Tarrytown, New York 10591

2. Related Appeals and Interferences

To the knowledge of the undersigned, there are no related interferences or appeals.

3. Status of the Claims

Claims 1-10, 12, 14 and 15 are pending and are under consideration.

All claims 1-10, 12, 14 and 15 are finally rejected in the Office Action dated August 29, 2003.

4. Status of the Amendments

The most recent attempt to amend the present claims is in the Amendment filed November 13, 2002. Said Amendment was entered with the Request for Continued Examination under Rule 114 filed February 26, 2003.

Said Amendment brings up to date the status of the claims.

Appealed claims 1-10, 12, 14 and 15 are present in the attached Appendix.

5. Summary of the Invention

The present invention pertains to color photographic material comprising certain lactone (benzofuranone) compounds of the formula (I). In particular, the present invention pertains to a process for preventing migration of oxidized developer *via* the use of compounds of the formula (I) as scavengers for the oxidized developer (Dox-scavenger). The primary subject of the invention is a process for preventing migration of the oxidized developer in a color photographic material from one color sensitive layer to another by incorporating a compound of formula (I) into said material. The compound of formula (I) is incorporated for example in an interlayer between light sensitive layers. See for example the Abstract and page 1 and page 18 of the specification.

In particular, the present compositions comprise compounds of formula (IV), a subset of formula (I), page 13 of the specification.

The invention also discloses new compounds of formula (V), and a process for stabilizing organic material by incorporating therein a compound of formula (V), see pages 22-24 of the specification.

6. Issues

Two issues are presented for review:

Whether claims 1-10 and 12 are anticipated under 35 USC 102(b) by Birbaum, et al., U.S. Pat. No. 5,597,854 (Birbaum) and

Whether claims 14 and 15 are unpatentable under 35 USC 103(a) over Birbaum in view of Hinsken, et al., U.S. Pat. No. 4,325,863 (Hinsken).

7. Grouping of the Claims

The following three groups of claims are argued separately:

- 1) Claims 1-10, pertaining to a process for preventing migration of oxidized developer,
- 2) Claim 12, aimed at color photographic material or digital recording material and
- 3) Claims 14 and 15, aimed at compounds of formula (V) and a process for stabilizing organic material by incorporating therein a compound of formula (V).

8. Argument

The Examiner rejects claims 1-10 and 12 under 35 USC 102(b) as being anticipated by Birbaum. Appellants respectfully rebut this rejection.

The Examiner states that Birbaum discloses a silver halide photographic material containing benzofuranones. This statement assumes that the triazine UV absorbers disclosed by Birbaum can also contain stabilizers of classes 1-14 (col. 23-29), which includes benzofuranones (col. 29). Stabilizers of classes 1-14 are taught as optionally added to the Birbaum compositions since they are active in organic polymer materials (col. 20, lines 14-23). Appellants submit that, with the exception of the hydroquinones (class 1.3), **none of the compounds of classes 1-14 had been shown to function as an oxidized developer scavenger. This problem was not addressed in the Birbaum patent.**

To define the benzofuranones as stabilizers (class 14) Birbaum refers to a number of patents, such as, for example:

U.S. Pat. Nos. 4,325,863 and 4,338,244 both entitled "Benzofuranone or indolinone compounds useful as stabilizers for organic materials"; **U.S. Pat. No. 5,175,312** entitled 3-phenylbenzofuran-2-ones and describing organic material stabilized by means of 3-phenylbenzofuran-2-ones against thermal, oxidative and actinic degradation and to the use of 3-phenylbenzofuran-2-ones for stabilizing organic materials; **U.S. Pat. No. 5,216,052** entitled

"Bisbenzofuran-2-one" and describing the use of bisbenzofuran-2-one for stabilizing organic materials and to the stabilized organic material thereby obtained; **U.S. Pat. No. 5,252,643** entitled "Thiomethylated benzofuran-2-ones" describing compounds which are benzofuran-2-ones having two organothiomethyl substituents directly attached to the benzo ring are suitable for stabilizing organic materials against thermal, oxidative or light-induced degradation.

The above mentioned patents clearly show that benzofuranone compounds have been added to the triazine UV absorbers to further stabilize organic material. None of the patents give any hint that benzofuranone compounds can function as developed oxidizer scavengers.

Moreover, Appellants point out that the teaching of Birbaum as to the optional stabilizers of classes 1-14 is very broad (columns 23-29). Some of the classes in turn are divided in distinct subclasses of a considerable number, e.g. classes 1 and 2. The extensive list of optional stabilizers is followed by patentee's statement that the Birbaum compositions preferably comprise additional light stabilizers, such as given in subclasses 2.1, 2.6 and 2.8, e.g. sterically hindered amines (Column 29, line 56 to column 30, line 11), in particular, if component A is a binder for coatings (column 30, lines 17-19). Furthermore, it is to be mentioned that the only application example given in Birbaum (columns 58-59) refers to the stabilization of such a coating which contains a sterically hindered amine. The indicated teaching neither directs someone of ordinary skill to add benzofuranones of class 14 as the optional component, nor does it advise the optional component to be added to photographic material.

The first part (columns 1-34) of Birbaum deals with the use of triazine UV absorbers for stabilizing organic material. In the middle of column 34 (starting with line 25) it is said that the triazines can also be used in photographic material. Furthermore, it is said that the triazine UV absorbers can be combined with further UV absorbers when used in photographic material. As further UV absorbers, among others, compounds belonging to class 2 of the extensive list of optional stabilizers are mentioned (hydroxyphenylbenzotriazoles corresponding to subclass 2.1, benzophenones corresponding to subclass 2.2, oxanilides corresponding to subclass 2.7, cyanoacrylates corresponding to subclass 2.4, salicylates corresponding to subclass 2.3, acrylonitriles and thiazolines). There is absolutely no reference to the addition of stabilizers of class 14. In other words, the part of Birbaum dealing with photographic material does not list benzofuranones of class 14 as an optional component. **In fact some of the compounds of classes 1-14 will have a negative effect on the stability of the dyes.** Especially negative effects would result from the use of

the compounds listed in class 1.19, aminic antioxidants including phenolic compounds, which would behave as cyan couplers if incorporated into photographic material. See column 40 formula (E) and column 41 formula (E-7) and (E-8).

Claim 1 defines a process for preventing the migration of the oxidized developer in a color photographic material from the light sensitive silver halide emulsion layer in which it has been formed into another silver halide emulsion layer containing color couplers comprising the steps of **incorporating** a benzofuranone compound of the formula (I) into an interlayer between the light sensitive silver halide emulsion layers and **scavenging** the oxidized form of a developer when migrating from the light sensitive silver halide emulsion layer in which it has been formed to the interlayer. The teachings in Birbaum do not disclose or suggest practicing a process as claimed herein. Birbaum does not anticipate or render the claimed process unpatentable. The Examiner's reasoning for rejection appears to be based on a hindsight interpretation of the prior art. There is no indication given in the prior art which would motivate someone of ordinary skill to use benzofuranones of class 14 in photographic materials for the claimed process.

Therefore, present claims 1-10, aimed at the process of claim 1, are not anticipated by Birbaum.

Likewise, claim 12, aimed at a color photographic or digital recording material containing a compound of formula (IV) is also not anticipated by Birbaum.

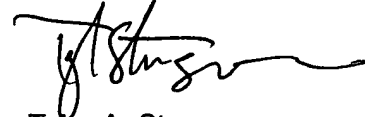
The Examiner rejects claims 14 and 15 under 35 USC 103 as being unpatentable over Birbaum in view of Hinsken. Appellants respectfully traverse this rejection.

The Examiner noted that the rejection was premised on the compounds of formula VI. Compounds of formula VI are removed in the Amendment filed Nov. 13, 2002.

In view of the above discussion, Appellants submit that the present 35 USC 102(b) and 35 USC 103(a) rejections are addressed and are successfully rebutted.

Appellants aver that these rejections are in error as outlined above and respectfully request that they be reversed.

Respectfully submitted,



Tyler A. Stevenson
Agent for Appellants
Reg. No. 46,388

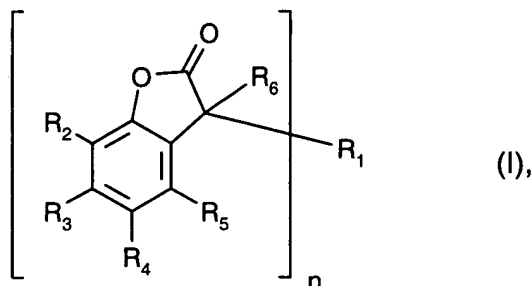
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Tel. (914)785-2783
Fax (914)785-7102

MAR 29 2004

Attachments: Appendix with claims on appeal
Petition for a two month extension

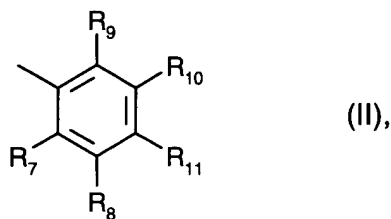
9. Appendix Appealed claims 1-10, 12, 14 and 15

1. (previously presented) A process for preventing the migration of oxidised developer in a colour photographic material from a light sensitive silver halide emulsion layer in which it has been formed into another silver halide emulsion layer containing colour couplers comprising the steps of: incorporating a compound of the formula I



wherein, if $n = 1$,

R_1 is a cyclic residue selected from naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxaliny, quinazolinyl, cinnoliny, pteridinyl, carbazolyl, β -carboliny, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazany, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, hydroxy, halogen, amino, C_1 - C_4 alkylamino, phenylamino or di(C_1 - C_4 -alkyl)amino; or R_1 is a radical of formula II



and, if $n = 2$,

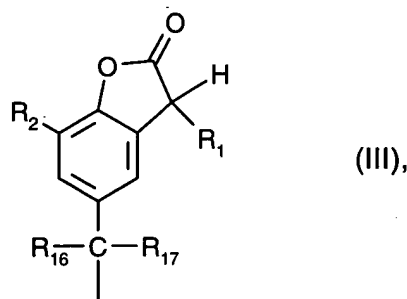
R_1 is unsubstituted or C_1 - C_4 alkyl- or hydroxy-substituted phenylene or naphthylene; or $-R_{12}-X-R_{13}-$; R_2 , R_3 , R_4 and R_5 are each independently of one another hydrogen; chloro; hydroxy; C_1 - C_{25} -alkyl; C_7 - C_9 phenylalkyl; unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; C_1 - C_{18} alkoxy; C_1 - C_{18} alkylthio; C_1 - C_4 alkylamino; di(C_1 - C_4 -alkyl)amino; C_1 -

C₂₅alkanoyloxy; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyloxy; C₃-C₂₅alkanoyloxy which is interrupted by oxygen, sulphur or >N-R_{14} ; C₆-C₉cycloalkylcarbonyloxy; benzoyloxy or C₁-C₁₂alkyl-substituted

benzoyloxy; or R₂ and R₃, or R₃ and R₄, or R₄ and R₅, together with the linking carbon atoms, form a benzene ring;

or R₄ is -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR'₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R'₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or -(CH₂)_qOH;

or, if R₃, R₅ and R₆ are hydrogen, R₄ is additionally a radical of formula III



wherein R₁ is as defined above for n = 1;

R₆ is hydrogen or, when R₄ is hydroxy, R₆ can also be C₁-C₂₅alkyl or C₃-C₂₅alkenyl;

R₇ and R₉, are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl which is

interrupted by oxygen, sulphur or >N-R_{14} ; C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenyloxy; C₃-

C₂₅alkynyl; C₃-C₂₅alkynyloxy; C₇-C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl- substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen,

sulphur or >N-R_{14} ; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyl; C₃-C₂₅alkenoyl which is interrupted by

oxygen, sulphur or >N-R_{14} ; C₃-C₂₅alkenoyloxy; C₃-C₂₅alkenoyloxy which is interrupted by

oxygen, sulphur or >N-R_{14} ; C₆-C₉cycloalkylcarbonyl; C₆-C₉cycloalkylcarbonyloxy; benzoyl or C₁-

C₁₂alkyl-substituted benzoyl; benzoyloxy or C₁-C₁₂alkyl-substituted benzoyloxy; $\text{---O---}\overset{\overset{\text{R}_{18}}{\text{|}}}{\underset{\underset{\text{R}_{19}}{\text{|}}}{\text{C}}}\text{---}\overset{\overset{\text{O}}{\text{||}}}{\text{C}}\text{---R}_{15}$

or $\text{---O---}\overset{\overset{\text{R}_{20}}{\text{|}}}{\underset{\underset{\text{H}}{\text{|}}}{\text{C}}}\text{---}\overset{\overset{\text{R}_{21}}{\text{|}}}{\underset{\underset{\text{R}_{22}}{\text{|}}}{\text{C}}}\text{---O---R}_{23}$;

R₈, R₁₀ and R₁₁ are each independently of one another hydrogen; halogen; hydroxy; C₁-C₂₅alkyl; C₂-

C₂₅alkyl which is interrupted by oxygen, sulphur or >N---R_{14} ; C₁-C₂₅alkoxy; C₂-C₂₅alkoxy which is

interrupted by oxygen, sulphur or >N---R_{14} ; C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenylloxy; C₃-

C₂₅alkynyl; C₃-C₂₅alkynylloxy; C₇-C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-

substituted phenyl; unsubstituted or C₁-C₄alkyl- substituted phenoxy; unsubstituted or C₁-C₄alkyl-

substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-

C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen,

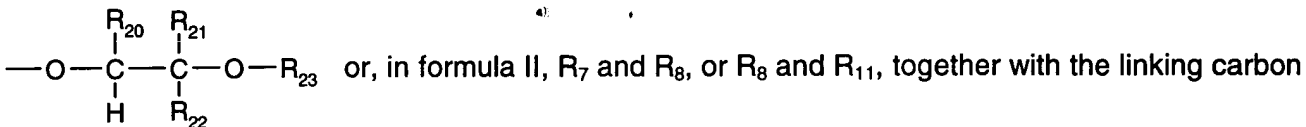
sulphur or >N---R_{14} ; C₁-C₂₅alkanoyloxy; C₃-C₂₅alkanoyloxy which is interrupted by oxygen, sulphur

or >N---R_{14} ; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyl; C₃-C₂₅alkenoyl which is interrupted by oxygen,

sulphur or >N---R_{14} ; C₃-C₂₅alkenoyloxy; C₃-C₂₅alkenoyloxy which is interrupted by oxygen, sulphur

or >N---R_{14} ; C₆-C₉cycloalkylcarbonyl; C₆-C₉cycloalkylcarbonyloxy; benzoyl or C₁-C₁₂alkyl-

substituted benzoyl; benzoyloxy or C₁-C₁₂alkyl-substituted benzoyloxy; $\text{---O---}\overset{\overset{\text{R}_{18}}{\text{|}}}{\underset{\underset{\text{R}_{19}}{\text{|}}}{\text{C}}}\text{---}\overset{\overset{\text{O}}{\text{||}}}{\text{C}}\text{---R}_{15}$ or



atoms, form a benzene ring;

R₁₂ and R₁₃ are each independently of the other unsubstituted or C₁-C₄alkyl-substituted phenylene or naphthylene;

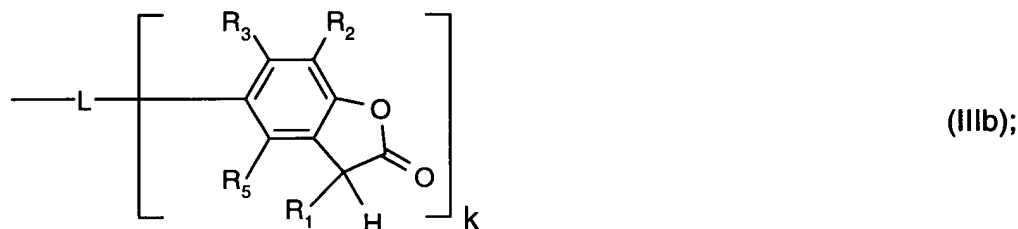
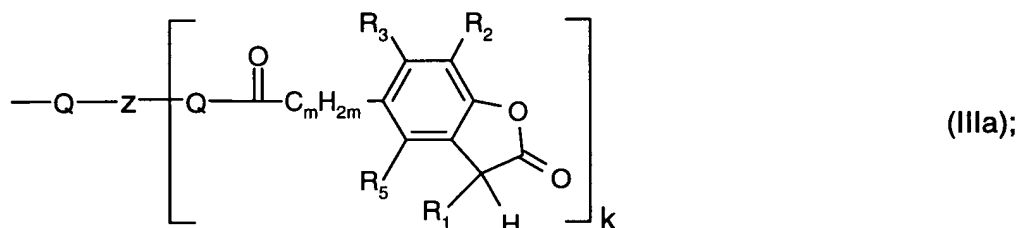
R₁₄ is hydrogen or C₁-C₈alkyl;

R₁₅ and R'₁₅ independently are hydroxy; $\left[-\text{O}^- \frac{1}{r} \text{M}^{r+} \right]$; C₁-C₂₀alkoxy; C₃-C₂₀alkoxy interrupted by

O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-

C₁₅alkoxyphenoxy; or are C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; $-\text{N} \begin{array}{l} \text{R}_{24} \\ \text{R}_{25} \end{array}$; or a group

of the formula IIIa or IIIb

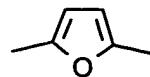


R₁₆ and R₁₇ are each independently of the other hydrogen, CF₃, C₁-C₁₂alkyl or phenyl, or R₁₆ and R₁₇, together with the linking carbon atom, are a C₅-C₈cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

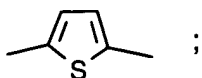
R₁₈ and R₁₉ are each independently of the other hydrogen, C₁-C₄alkyl or phenyl;

R₂₀ is hydrogen or C₁-C₄alkyl;

C₈bicycloalkylene; unsubstituted or C₁-C₄alkyl-substituted phenylene;



or



R₂₈ is hydroxy, $\left[-O^- \frac{1}{r} M^{r+} \right]$, C₁-C₁₈alkoxy or $-N \begin{matrix} R_{24} \\ R_{25} \end{matrix}$;

R₂₉ is oxygen or -NH-;

R₃₀ is C₁-C₁₈alkyl or phenyl;

R₃₁ is hydrogen or C₁-C₁₈alkyl;

R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is as a divalent group

-O-;

Q-C₂-C₁₂alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L as a trivalent group is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃-C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q)-C_cH_{2c}-Q-;

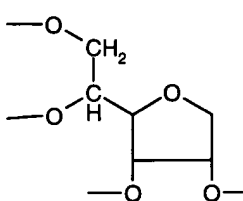
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

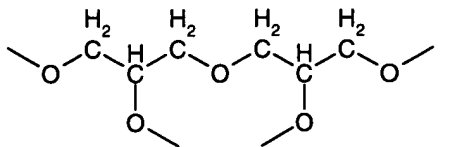
L as a tetravalent group is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetriyl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetriyl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetriyl; a group



or a group



M is an r-valent metal cation;

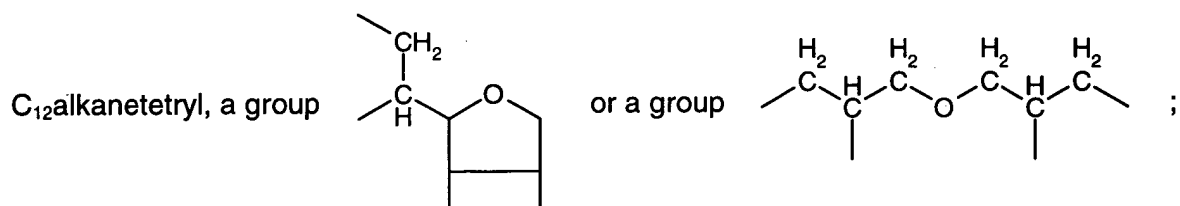
Q is oxygen or -NH-;

X is a direct bond, oxygen, sulphur or -NR₃₁-;

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene; Q-interrupted C₄-C₁₂alkylene; phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

Z as a trivalent group is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent, carbon-ended residue of a hexose or a hexitol, C₄-



a, b, c and k independently are 1, 2 or 3;

m is 0 or a number from the range 1-12;

n is 1 or 2;

q is 1, 2, 3, 4, 5 or 6;

r is 1, 2 or 3; and

s is 0, 1 or 2;


v is 1, 2, 3, 4, 5, 6, 7 or 8;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄; and when R₉ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₇ is hydrogen, R₈ is not identical with R₄,

into an interlayer between the light sensitive silver halide emulsion layers thus scavenging the oxidized form of developer when migrating from the light sensitive silver halide emulsion layer in which it has been formed to the interlayer.

2. (original) Process according to claim 1, wherein in the compound of formula I

R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl which is

interrupted by oxygen, sulphur or  N—R₁₄ ; C₂-C₂₅alkoxy which is interrupted by oxygen, sulphur

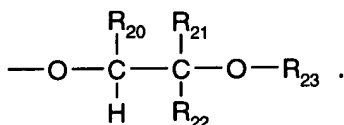
or >N-R_{14} ; C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenyloxy; C₃-C₂₅alkynyl; C₃-C₂₅alkynyloxy; C₇-

C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl- substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-

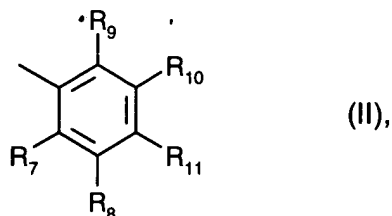
C₂₅alkanoyl which is interrupted by oxygen, sulphur or >N-R_{14} ; C₁-C₂₅alkanoylamino; C₃-

C₂₅alkenoyl; C₃-C₂₅alkenoyl which is interrupted by oxygen, sulphur or >N-R_{14} ; C₆-C₉-

cycloalkylcarbonyl; benzoyl or C₁-C₁₂alkyl-substituted benzoyl; $\text{—O—}\begin{array}{c} \text{R}_{18} \\ | \\ \text{C} \\ | \\ \text{R}_{19} \end{array}\text{—}\overset{\text{O}}{\parallel}\text{C—R}_{15}$ or



3. (previously presented) Process according to claim 1 wherein in the compound of formula I R₁ is naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizinyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizinyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, carbazolyl, □-carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₄alkylthio, hydroxy, halogen, amino, C₁-C₄alkylamino, phenylamino or di(C₁-C₄-alkyl)amino, or R₁ is a radical of formula II

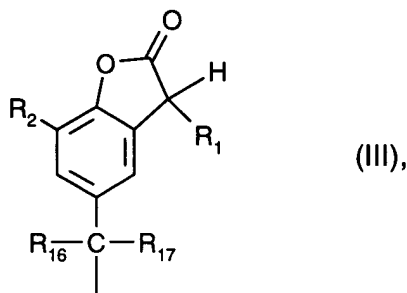


and, if $n = 2$,

R_1 is unsubstituted or C_1 - C_4 alkyl- or hydroxy-substituted phenylene or naphthylene; or $-R_{12}-X-R_{13}-$, R_2 , R_3 , R_4 and R_5 are each independently of one another hydrogen, chloro, hydroxy, C_1 - C_{25} alkyl, C_7 - C_9 phenylalkyl, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; C_1 - C_{18} alkoxy, C_1 - C_{18} alkylthio, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, C_1 - C_{25} alkanoyloxy, C_1 - C_{25} alkanoylamino, C_3 - C_{25} alkenoyloxy; C_3 - C_{25} alkanoyloxy which is interrupted by oxygen, sulphur or $\text{>N}-R_{14}$; C_6 - C_9 cycloalkylcarbonyloxy, benzoyloxy or C_1 - C_{12} alkyl-substituted

benzoyloxy; or R_2 and R_3 , or R_3 and R_4 , or R_4 and R_5 , together with the linking carbon atoms, form a benzene ring; or R_4 is

$-C_mH_{2m}-COR_{15}$ or $-(CH_2)_qOH$ or, if R_3 , R_5 and R_6 are hydrogen, R_4 is additionally a radical of formula III



wherein R_1 is as defined above for $n = 1$;

R_6 is hydrogen or, when R_4 is hydroxy, R_6 can also be C_1 - C_{25} alkyl or C_3 - C_{25} alkenyl;

R_7 , R_8 , R_9 , R_{10} and R_{11} are each independently of one another hydrogen, halogen, hydroxy, C_1 -

C_{25} alkyl; C_2 - C_{25} alkyl which is interrupted by oxygen, sulphur or $\text{>N}-R_{14}$; C_1 - C_{25} alkoxy; C_2 -

C_{25} alkoxy which is interrupted by oxygen, sulphur or $\text{>N}-R_{14}$; C_1 - C_{25} alkylthio, C_3 - C_{25} -alkenyl, C_3 -

C_{25} alkenyloxy, C_3 - C_{25} alkynyl, C_3 - C_{25} alkynyloxy, C_7 - C_9 phenylalkyl, C_7 - C_9 phenylalkoxy, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted phenoxy; unsubstituted or C_1 -

C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino, di(C₁-C₄alkyl)amino, C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen,

sulphur or >N-R_{14} ; C₁-C₂₅alkanoyloxy; C₃-C₂₅alkanoyloxy which is interrupted by oxygen, sulphur

or >N-R_{14} ; C₁-C₂₅alkanoylamino, C₃-C₂₅alkenoyl; C₃-C₂₅alkenoyl which is interrupted by oxygen,

sulphur or >N-R_{14} ; C₃-C₂₅alkenoyloxy; C₃-C₂₅alkenoyloxy which is interrupted by oxygen, sulphur

or >N-R_{14} ; C₆-C₉cycloalkylcarbonyl, C₆-C₉cycloalkylcarbonyloxy, benzoyl or C₁-C₁₂alkyl-

substituted benzoyl; benzoyloxy or C₁-C₁₂alkyl-substituted benzoyloxy; $\text{—O—}\overset{\overset{\text{R}_{18}}{\text{|}}}{\underset{\underset{\text{R}_{19}}{\text{|}}}{\text{C}}}\text{—}\overset{\overset{\text{O}}{\text{||}}}{\text{C}}\text{—R}_{15}$ or

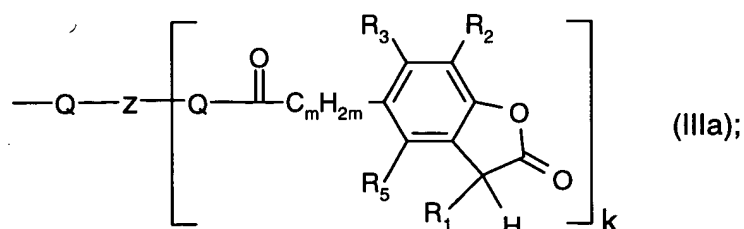
$\text{—O—}\overset{\overset{\text{R}_{20}}{\text{|}}}{\underset{\underset{\text{H}}{\text{|}}}{\text{C}}}\text{—}\overset{\overset{\text{R}_{21}}{\text{|}}}{\underset{\underset{\text{R}_{22}}{\text{|}}}{\text{C}}}\text{—O—R}_{23}$ or, in formula II, R₇ and R₈, or R₈ and R₁₁, together with the linking carbon

atoms, form a benzene ring,

R₁₂ and R₁₃ are each independently of the other unsubstituted or C₁-C₄alkyl-substituted phenylene or naphthylene,

R₁₄ is hydrogen or C₁-C₈alkyl,

R₁₅ is hydroxy, $\left[\text{—O}^- \frac{1}{r} \text{M}^{r+}\right]$, C₁-C₂₀alkoxy, $\text{—N}\overset{\overset{\text{R}_{24}}{\text{|}}}{\underset{\underset{\text{R}_{25}}{\text{|}}}{\text{—}}}$, or a group of the formula IIIa



R₁₆ and R₁₇ are each independently of the other hydrogen, CF₃, C₁-C₁₂alkyl or phenyl, or R₁₆ and R₁₇, together with the linking carbon atom, are a C₅-C₈cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₁₈ and R₁₉ are each independently of the other hydrogen, C₁-C₄alkyl or phenyl,

R₂₀ is hydrogen or C₁-C₄alkyl,

R₂₁ is hydrogen, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₂₅alkyl; C₂-C₂₅alkyl which is

interrupted by oxygen, sulphur or >N-R_{14} ; C₇-C₉phenylalkyl which is unsubstituted or substituted

at the phenyl moiety by 1 to 3 C₁-C₄alkyl; C₇-C₂₅phenylalkyl which is interrupted by oxygen, sulphur or

>N-R_{14} and which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C₁-C₄alkyl, or R₂₀

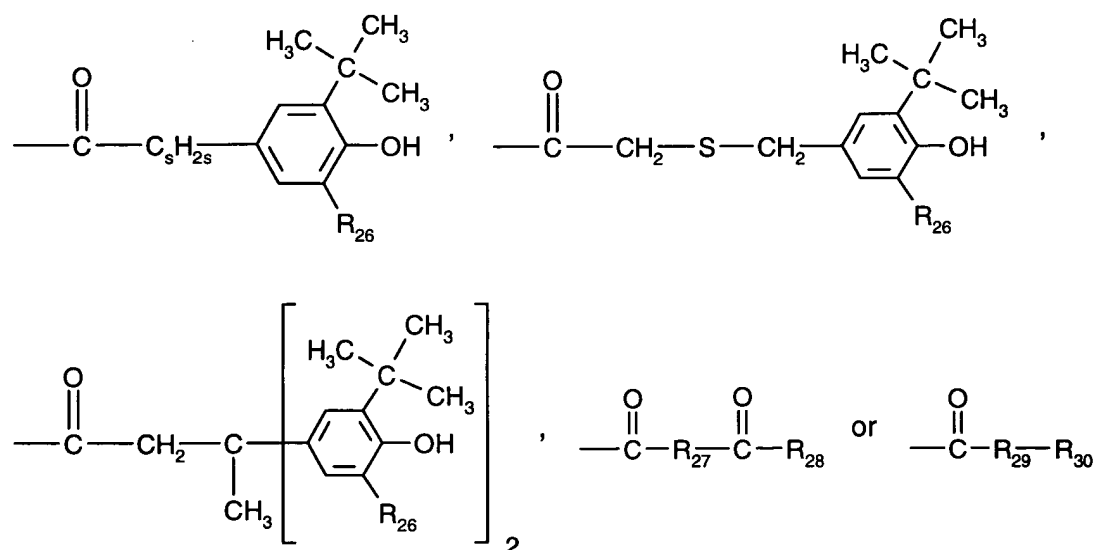
and R₂₁, together with the linking carbon atoms, form a C₅-C₁₂cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₂₂ is hydrogen or C₁-C₄alkyl,

R₂₃ is hydrogen, C₁-C₂₅alkanoyl, C₃-C₂₅alkenoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen,

sulphur or >N-R_{14} ; C₂-C₂₅alkanoyl which is substituted by a di(C₁-C₆alkyl)phosphonate group;

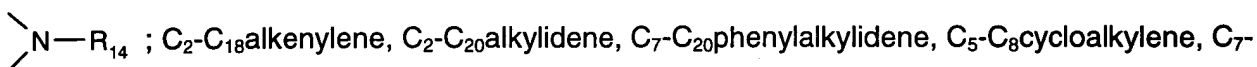
C₆-C₉cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C₁-C₁₂alkyl-substituted benzoyl;



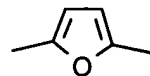
R₂₄ and R₂₅ are each independently of the other hydrogen or C₁-C₁₈alkyl,

R₂₆ is hydrogen or C₁-C₈alkyl,

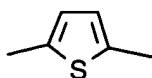
R_{27} is a direct bond, C_1 - C_{18} alkylene; C_2 - C_{18} alkylene which is interrupted by oxygen, sulphur or



C_8 bicycloalkylene, unsubstituted or C_1 - C_4 alkyl-substituted phenylene,



or



R_{28} is hydroxy, $\left[-O^- \frac{1}{r} M^{r+} \right]$, C_1 - C_{18} alkoxy or $-N \begin{matrix} R_{24} \\ R_{25} \end{matrix}$,

R_{29} is oxygen or -NH-,

R_{30} is C_1 - C_{18} alkyl or phenyl,

R_{31} is hydrogen or C_1 - C_{18} alkyl,

M is an r-valent metal cation,

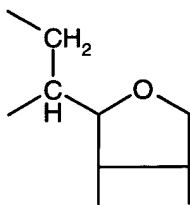
Q is oxygen or -NH-,

X is a direct bond, oxygen, sulphur or -NR₃₁- ,

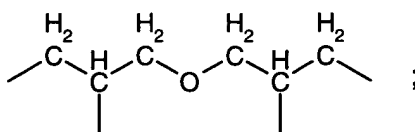
Z is a linking group of valency (k+1) and is as a divalent group C_2 - C_{12} alkylene, Q-interrupted C_4 - C_{12} alkylene, phenylene or phenylene-D-phenylene with D being C_1 - C_4 alkylene, O, S, SO or SO₂;

Z as a trivalent group is C_3 - C_{12} alkanetriyl, a trivalent residue of a hexose or a hexitol, a group $(-CH_2)_3C-CH_2OH$, or a group $-C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}$; and

Z as a tetravalent group is a tetravalent residue of a hexose or a hexitol, C_4 - C_{12} alkanetetryl, a group



or a group



a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12,

n is 1 or 2,

q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3, and

s is 0, 1 or 2;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄.

4. (original) Process according to claim 1, wherein in the compound of formula I

R₂, R₃ and R₅, independently, are H, Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy, C₃-C₂₅alkenoyloxy; and where

R₄ is Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy, C₃-C₂₅alkenoyloxy or is a group -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR'₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R'₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or where R₃, R₅ and R₆ are H, R₄ may be a residue of formula III, or where R₈ or R₁₀ are other than H, R₄ may also be hydrogen;

R₆ is H,

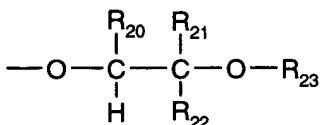
R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl which is

interrupted by oxygen, sulphur or $\begin{array}{c} \diagup \\ \text{N}-\text{R}_{14} \\ \diagdown \end{array}$; C₃-C₂₅-alkenyl; C₃-C₂₅alkynyl; C₇-C₉phenylalkyl;

unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl;

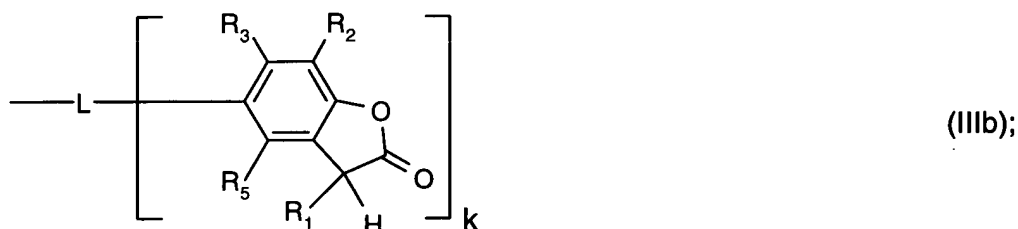
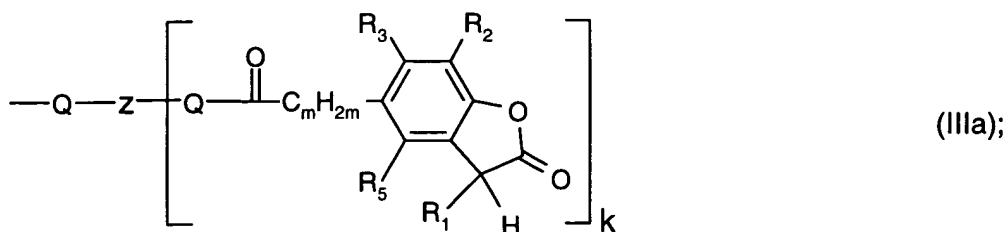
R₈, R₁₀ and R₁₁ independently are H, halogen, hydroxy, C₁-C₂₅alkyl, O interrupted C₂-C₂₅alkyl; C₁-C₂₅alkoxy, O interrupted C₂-C₂₅alkoxy, C₃-C₂₅alkenyl, C₃-C₂₅alkenoyloxy, C₇-C₉phenylalkyl, C₇-C₉phenylalkoxy, unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl substituted phenoxy; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino, di-(C₁-C₄-alkyl)amino, C₁-C₂₅alkanoyl; C₁-C₂₅alkanoyloxy; C₆-C₉cycloalkylcarbonyl, C₆-C₉cycloalkylcarbonyloxy, benzoyl or C₁-C₁₂alkyl-

substituted benzoyl; benzoyloxy or C₁-C₁₂alkyl substituted benzoyloxy; $\begin{array}{c} \text{R}_{18} \quad \text{O} \\ | \quad || \\ -\text{O}-\text{C}-\text{C}-\text{R}_{15} \\ | \\ \text{R}_{19} \end{array}$ or



, or where in formula II R₇ and R₈ or R₈ and R₁₁ together with the carbon atoms, they are bonded to, form a phenyl ring;

R₁₅ and R'₁₅ independently are C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or are C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; or -NR₂₃R₂₄; or a group of formula IIIa or IIIb;



R₁₆ and R₁₇ independently are H, CF₃, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form an unsubstituted or 1-3 C₁-C₄alkyl-substituted C₅-C₈cycloalkylidene ring;

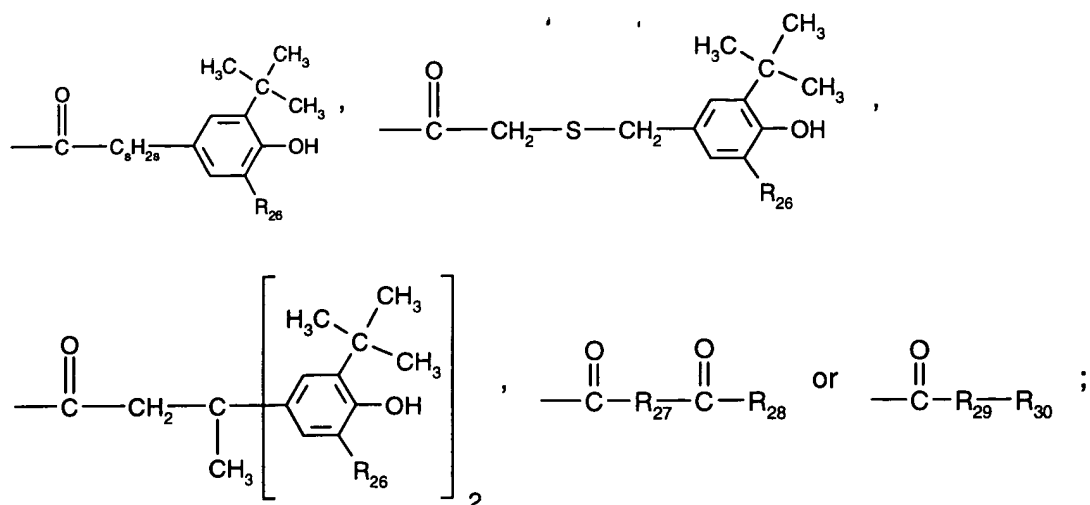
R₁₈ and R₁₉ independently are H, C₁-C₄alkyl or phenyl;

R₂₀ is H or C₁-C₄alkyl;

R₂₁ is H, unsubstituted or C₁-C₄alkyl substituted phenyl; C₁-C₂₅alkyl, unsubstituted or on the phenyl ring 1-3 C₁-C₄alkyl-substituted C₇-C₉phenylalkyl;

R₂₂ is H or C₁-C₄alkyl;

R₂₃ is H, C₁-C₂₅alkanoyl, C₃-C₂₅alkenoyl; di(C₁-C₆alkyl)phosphonate-substituted C₂-C₂₅alkanoyl; C₆-C₉cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C₁-C₁₂alkyl-substituted benzoyl;

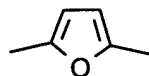


R_{24} and R_{25} independently are H or $\text{C}_1\text{-C}_{18}$ alkyl;

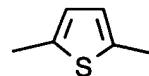
R_{26} is H or $\text{C}_1\text{-C}_8$ alkyl;

R_{27} is a direct bond, $\text{C}_1\text{-C}_{18}$ alkylen, $\text{C}_2\text{-C}_{18}$ alkenylen, $\text{C}_7\text{-C}_{20}$ phenylalkyliden, $\text{C}_5\text{-C}_8$ cycloalkylen,

unsubstituted or $\text{C}_1\text{-C}_4$ alkyl-substituted phenylene,



or



;

R_{28} $\text{C}_1\text{-C}_{18}$ alkoxy or $-\text{N}(\text{R}_{24})(\text{R}_{25})$;

R_{29} is O or -NH-;

R_{30} $\text{C}_1\text{-C}_{18}$ alkyl or phenyl;

M a metal cation of the valency r;

X a direct bond, O, S or -NR₃₁- ;

n 1 or 2;

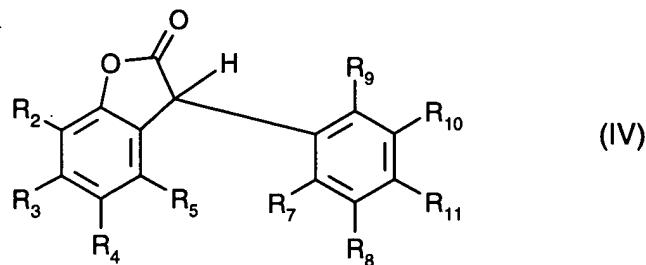
m is a number from the range 1-8;

q 1, 2, 3, 4, 5 or 6;

r 1, 2 or 3; and

s is 0, 1 or 2.

5. (previously presented) Process according to claim 1 wherein the compound of formula I corresponds to the formula IV

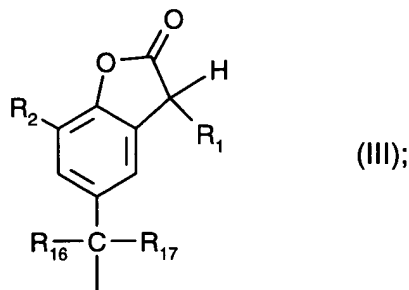


wherein

R₂ is H or C₁-C₂₀alkyl;

R₃ is H or C₁-C₁₈alkyl;

R₄ is C₁-C₈alkyl, H, C₁-C₆alkoxy or a group -C_mH_{2m}-COR₁₅; -O-(C_vH_{2v})-COR₁₅,
-O-(CH₂)_q-OR₃₂; -OCH₂-CH(OH)-CH₂-R₁₅; -OCH₂-CH(OH)-CH₂-OR₃₂;
or a group of the formula III



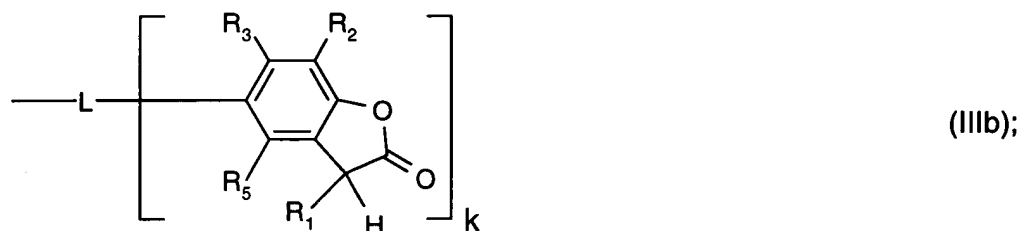
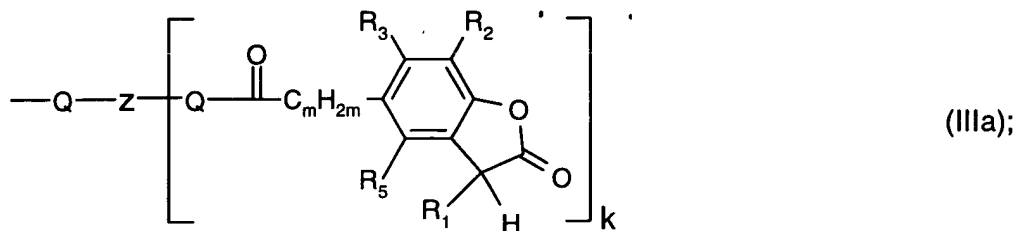
R₅ is H or C₁-C₁₈alkyl;

R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₃-C₂₅-alkenyl; C₃-C₂₅alkynyl; C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl;

R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-C₄alkyl)amino, C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted

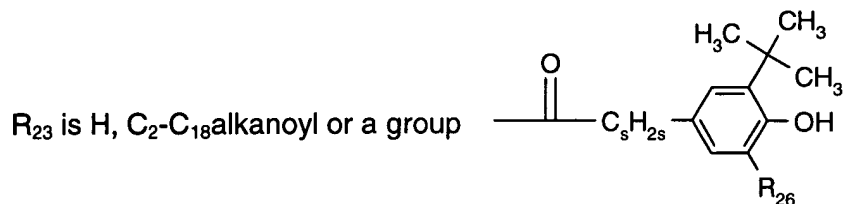
C₅-C₈cycloalkyl; C₂-C₁₈alkanoyloxy, C₃-C₁₈-alkoxycarbonylalkoxy or $\text{---O---}\overset{\overset{\text{R}_{20}}{\text{|}}}{\underset{\underset{\text{H}}{\text{|}}}{\text{C}}}\text{---}\overset{\overset{\text{R}_{21}}{\text{|}}}{\underset{\underset{\text{R}_{22}}{\text{|}}}{\text{C}}}\text{---O---R}_{23}$;

R₁₅ is C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O; or are cyclohexyloxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;



R_{16} and R_{17} independently are H, C_1 - C_{12} alkyl or phenyl; or R_{16} and R_{17} together with the bonding carbon atom form a C_5 - C_8 cycloalkylidene ring;

R_{20} , R_{21} and R_{22} independently are H or C_1 - C_4 alkyl;



R_{26} is C_1 - C_4 alkyl;

R_{32} is C_1 - C_{18} alkanoyl; C_1 - C_8 alkanoyl substituted by phenyl or C_7 - C_{15} alkylphenyl; C_3 - C_{18} alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q- C_2 - C_{12} alkylene-Q; -O- CH_2 -CH(OH)- CH_2 -O-;

-Q- C_2 - C_{12} alkylene-Q-CO- C_vH_{2v} -O-; -O- C_2 - C_{12} alkylene-O- CH_2 -CH(OH)- CH_2 -O-;

Q is oxygen;

Z is C_2 - C_{12} alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6;

v is 1 or 2; and

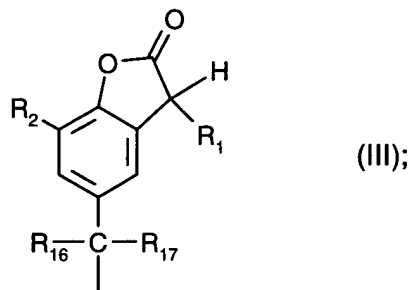
s is 0, 1 or 2.

6. (original) Process according to claim 5 wherein in the compound of formula IV

R_2 is C_1 - C_{20} alkyl;

R₃ is H or C₁-C₁₈alkyl;

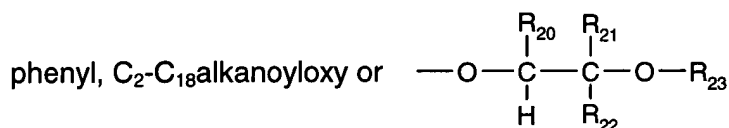
R₄ is C₁-C₆alkyl, C₁-C₆alkoxy or a group -C_mH_{2m}-COR₁₅ or a group of the formula III



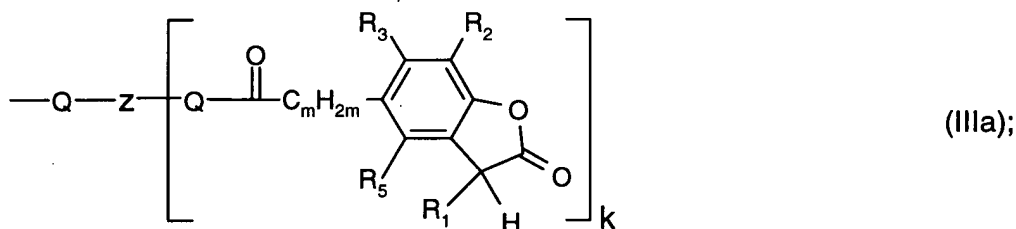
R₅ is H or C₁-C₁₈alkyl;

R₇ and R₉ independently are H, chloro, C₁-C₁₈alkyl;

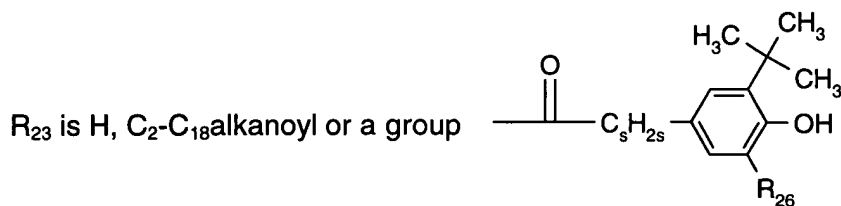
R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-C₄alkyl)amino,



R₁₅ is C₁-C₁₈alkoxy or a group of the formula IIIa



R₂₀, R₂₁ and R₂₂ are H;



R₂₆ is C₁-C₄alkyl;

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6 and

s is 0, 1 or 2.

7. (original) Process according to claim 5 wherein in the compound of formula IV, R_4 is C_1 - C_6 alkyl, or a group $-C_mH_{2m}-COR_{15}$, $-O-(C_vH_{2v})-COR_{15}$, $-O-(CH_2)_q-OR_{32}$, $-OCH_2-CH(OH)-CH_2-R_{15}$, $-OCH_2-CH(OH)-CH_2-OR_{32}$, or a group of the formula III.

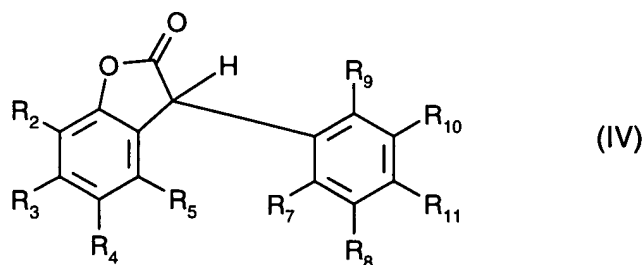
8. (original) Process according to claim 1, wherein the compound of formula I is incorporated into the colour photographic material in an amount from 10 to 1000 mg/m².

9. (original) Process according to claim 1, wherein the compound of formula I is concentrated in one or more interlayers separating light sensitive layers of the colour photographic material.

10. (original) Process according to claim 9, wherein a green-sensitive layer containing a magenta coupler of the pyrazolo-azole class is adjacent to an interlayer containing the compound of formula I.

11. (canceled)

12. (original) A colour photographic material or digital recording material containing a compound of the formula IV

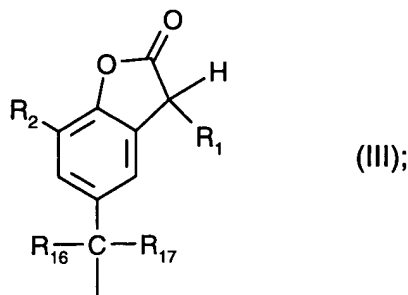


wherein

R_2 is H or C_1 - C_{20} alkyl;

R_3 is H or C_1 - C_{18} alkyl;

R_4 is C_1 - C_8 alkyl, C_1 - C_6 alkoxy or a group $-C_mH_{2m}-COR_{15}$; $-O-(C_vH_{2v})-COR_{15}$,
 $-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; $-OCH_2-CH(OH)-CH_2-OR_{32}$;
 or a group of the formula III



R_5 is H or C_1 - C_{18} alkyl;

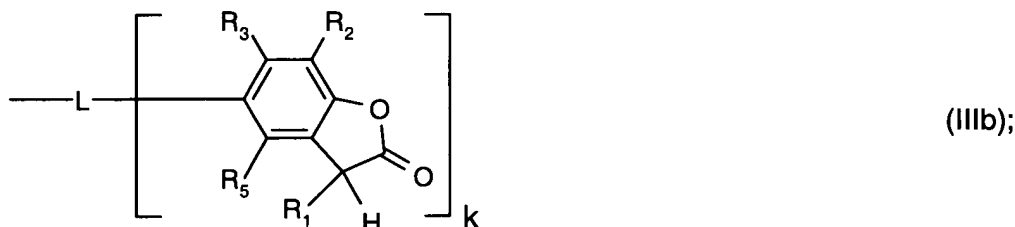
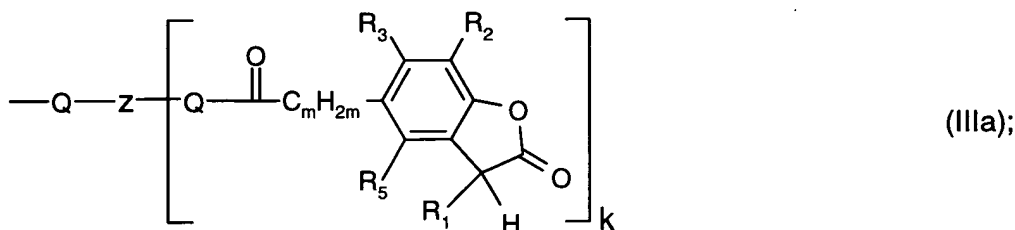
R_7 and R_9 independently are H, chloro, C_1 - C_{18} alkyl or phenyl;

;

R_8 , R_{10} and R_{11} independently are H, OH, chloro, C_1 - C_{18} alkyl, C_1 - C_{18} alkoxy, di(C_1 - C_4 alkyl)amino,

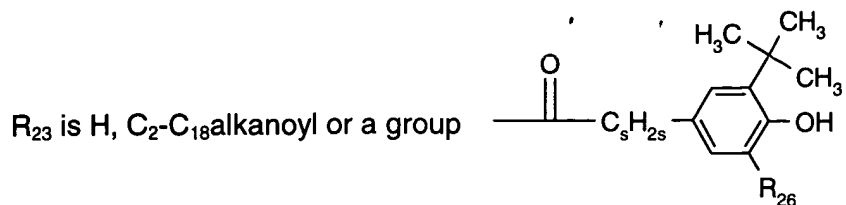
phenyl, C_2 - C_{18} alkanoyloxy, C_3 - C_{18} -alkoxycarbonylalkoxy or $-O-\overset{\overset{R_{20}}{|}}{\underset{\underset{H}{|}}{C}}-\overset{\overset{R_{21}}{|}}{\underset{\underset{R_{22}}{|}}{C}}-O-R_{23}$;

R_{15} is C_1 - C_{18} alkoxy; C_3 - C_{20} alkoxy interrupted by O; or are cyclohexyloxy; C_7 - C_{17} phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;



R_{16} and R_{17} independently are H, C_1 - C_{12} alkyl or phenyl; or R_{16} and R_{17} together with the bonding carbon atom form a C_5 - C_8 cycloalkylidene ring;

R_{20} , R_{21} and R_{22} independently are H or C_1 - C_4 alkyl;



R_{26} is C_1 - C_4 alkyl;

R_{32} is C_1 - C_{18} alkanoyl; C_1 - C_8 alkanoyl substituted by phenyl or C_7 - C_{15} alkylphenyl; C_3 - C_{18} alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q- C_2 - C_{12} alkylene-Q; -O- CH_2 -CH(OH)- CH_2 -O-;

-Q- C_2 - C_{12} alkylene-Q-CO- C_vH_{2v} -O-; -O- C_2 - C_{12} alkylene-O- CH_2 -CH(OH)- CH_2 -O-;

Q is oxygen;

Z is C_2 - C_{12} alkylene;

k is 1;

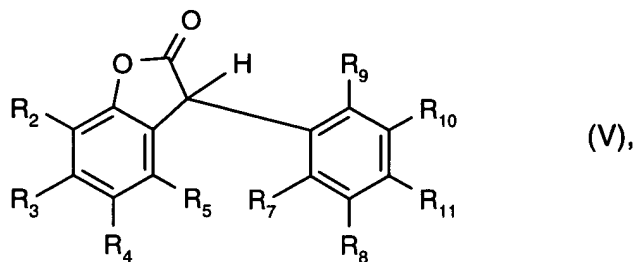
m is 1, 2, 3, 4, 5 or 6;

v is 1 or 2 and

s is 0, 1 or 2.

13. (canceled)

14. (previously presented) Compound of the formula V



wherein

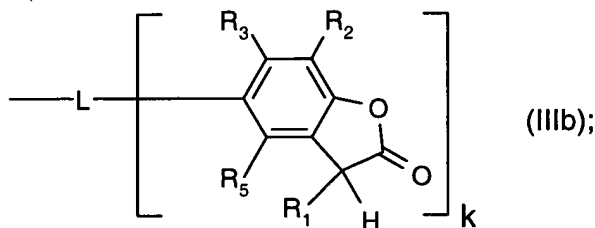
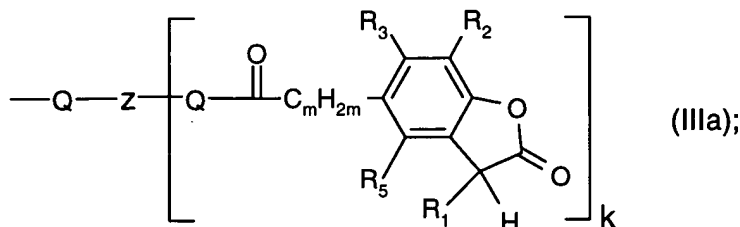
R_4 is -O-(C_vH_{2v})-COR₁₅; -O-(CH_2)_q-OR₃₂;

-OCH₂-CH(OH)-CH₂-R₁₅; or -OCH₂-CH(OH)-CH₂-OR₃₂;

R₁₅ is hydroxy, $\left[-\text{O}^- \frac{1}{r} \text{M}^{r+}\right]$, C₁-C₂₀alkoxy; C₃-C₂₀alkoxy interrupted by O and/or substituted by a

radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or R₁₅ is C₅-

C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; $-\text{N} \begin{matrix} \text{R}_{24} \\ \text{R}_{25} \end{matrix}$; or a group of formula IIIa or IIIb;



R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is, as a divalent group,

-O-;

Q-C₂-C₁₂alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L, as a trivalent group, is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃-C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q)-C_cH_{2c}-Q-;

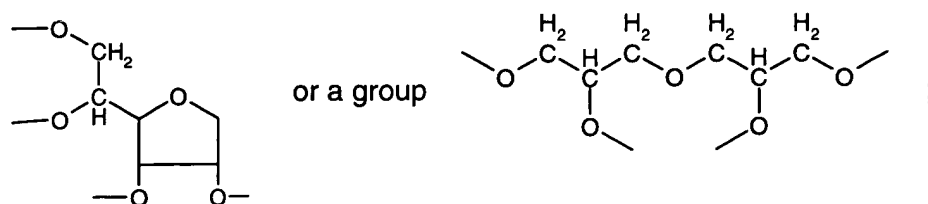
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

L, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetriyl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetryl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetryl; a group

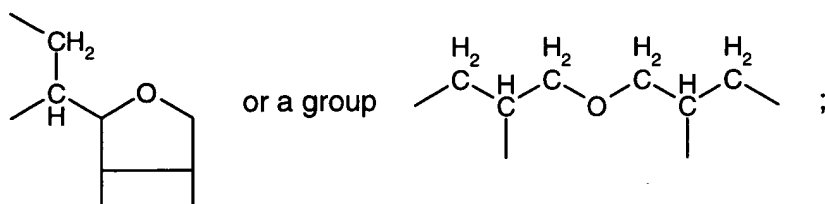


Q is oxygen or -NH-,

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene, Q-interrupted C₄-C₁₂alkylene, phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

Z, as a trivalent group, is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol, C₄-C₁₂alkanetetryl, a group



a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12,

s is 1 or 2,

v is 1, 2, 3, 4, 5, 6, 7 or 8;

and all other residues are as defined in claim 1 for formula I if n is 1.

15. (previously presented) Process for stabilizing an organic material against deterioration by light, oxygen and/or heat, which process comprises incorporating a compound of the formula V according to claim 14 as stabilizer into said organic material.

16. (canceled)